SUB E2 C1 CMCL'd

and a magnetic sensor outputting a signal in response to a variation of a magnetic flux density on the circular path.

Please add the following new claims.

C2

16. (New) A magnet pole position detector for a rotor that has a plurality of magnets disposed on a circular periphery, and rotates with a rotation shaft, the detector comprising:

plates of the same number as the magnets, the plates being made of a magnetic material, each of the plates being disposed on the rotor at a position along a circular path nearby a corresponding magnet and magnetized by leakage flux of the corresponding magnet, wherein the plates are fixed to an end face of the rotor, the end face facing in a direction along the rotation shaft; and

a magnetic sensor outputting a signal in response to a variation of a magnetic flux density on the circular path.

17. (New) A magnet pole position detector for a rotor that has a plurality of magnets disposed on a circular periphery, and rotates with a rotation shaft, the detector comprising:

plates of the same number as the magnets, the plates being made of a magnetic material, each of the plates being disposed on the rotor at a position along a circular path nearby a corresponding magnet and magnetized by leakage flux of the corresponding magnet, wherein the rotor comprises a rotor core retaining the magnets, and wherein the plates are fixed to the rotor core via an end plate made of a non-magnetic material; and

a magnetic sensor outputting a signal in response to a variation of a magnetic flux density on the circular path.

18. (New) A magnet pole position detector for a rotor that has a plurality of magnets disposed on a circular periphery, and rotates with a rotation shaft, the detector comprising:

plates of the same number as the magnets, the plates being made of a magnetic material, each of the plates being disposed on the rotor at a position along a circular path nearby a corresponding magnet and magnetized by leakage flux of the corresponding magnet, wherein the plates are provided in the form of a disk in which adjacent plates are separated by a radial groove formed on the disk; and